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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,413	01/16/2002	Charles Eric Pearce	PGI6044P0321US	6108
32116	7590	10/24/2005	EXAMINER	
WOOD, PHILLIPS, KATZ, CLARK & MORTIMER 500 W. MADISON STREET SUITE 3800 CHICAGO, IL 60661			TORRES VELAZQUEZ, NORCA LIZ	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 10/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/050,413

Applicant(s)

PEARCE ET AL.

Examiner

Norca L. Torres-Velazquez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2005 and 05 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-12 is/are pending in the application.
- 4a) Of the above claim(s) 1-4 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11 and 12 is/are allowed.
- 6) ☒ Claim(s) 5,6 and 8-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's amendment and arguments filed 8/4/05 and 10/05/05 have been fully considered but they are not persuasive. The Declaration under 37 C.F.R. § 1.132 submitted on July 06, 2005 and the Supplemental Response filed October 05, 2005, have been considered by the Examiner.

a. Applicants argue that the Kirayoglu reference *teaches away* from heat-setting of a hydroentangled filter media because claim 1 of the Kirayoglu reference requires that the fabric not be subjected to shrinkage. Applicants submitted a Declaration of Inventor Michael Putnam which specifically addresses the fact that subjecting the filter media of Kirayoglu to the heat treatment of Haid would, in fact, result in shrinkage of that filter media, contrary to the specific and acknowledged teachings of that reference. Applicants further provided a supplemental response (on 10/05/05), in which they studied the prosecution file history of the Kirayoglu reference showing that the language in claim 1 of the Kirayoglu reference specifies that the disclosed fabric not be subjected to a shrinking operation was added by an Examiner's amendment prior to allowing the case.

It is noted herein that the present invention as claimed requires a filter media with a shrinkage of less than about 3% and then heat-heated.

Applicants arguments and the Declaration of Inventor Putnam have been considered, however, it is the Examiner's position that there is no evidence that the fibers of the Kirayoglu reference are high shrinkage fibers that would shrink in the presence of the heat treatment of Haid. The type of fibers of the Kirayoglu reference is not specified. Further, the included limitation of a "fabric not subjected to a shrinking operation" was

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not originally disclosed in the specification of the Kirayoglu reference and it doesn't have to do with the teaching aspects of the reference.

It is the Examiner's interpretation that without evidence that shows that the fibers of Kirayoglu reference are high shrinkage fibers, Applicants arguments indicating that the heat-treatment of Haid will shrink the fabric taught by Kirayoglu is not sufficient to overcome the prior art of record.

b. With regards to new claims 11 and 12, it is noted herein that the prior art of HAID requires the inclusion of multi-component fusible fibers, which are now precluded by the claims. There is no new matter added to claims 11 and 12.

c. The obviousness-type double patenting of claims 5-6 and 8-10 has been withdrawn in view of Applicant's Terminal Disclaimer. The terminal disclaimer filed on 7/6/05 disclaiming the terminal portion of any patent granted on this application, which would extend beyond the expiration date of 10/778,661 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 5-6 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over KIRAYOGLU (US 4,556,601) in view of HAID et al. (US 5,240,764) for the reasons stated in previous action.

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KIRAYOGLU discloses a heavyweight, nonapertured, nonwoven fabric of hydraulically entangled synthetic organic staple fibers with a unit weight of 200 to 850 g/m² (6 to 25 oz/yd²). (Abstract; and Column 2, lines 25-28) The reference teaches the use of staple fibers of poly (ethylene terephthalate). (Column 2, lines 47-50) The reference further teaches that such heavyweight fabrics are desired in uses such as heavy-duty gas filtration. (Column 1, lines 55-56) However, KIRAYOGLU is silent to heat-treat the filter media.

HAID et al. discloses a process to make a spunlaced nonwoven fabric that includes hydraulically needling the fibers of the web to entangle them in a three-dimensional state and teaches heat setting the fibers to stabilize the web surface and increase the web durability and abrasion resistance. (Column 2, lines 6-32) The reference also teaches using polyester staple fibers. (Column 3, lines 4-15) HAID et al. teaches that the heat treatment involves heating the fibers to a temperature above their melting point to increase the fabric durability and abrasion resistance. (Col. 4, lines 36-42)

Since both references are directed to hydroentangled nonwoven webs, the purpose disclosed by HAID et al. would have been recognized in the pertinent art of KIRAYOGLU.

Although the combination of Kirayoglu and Haid et al. does not explicitly teach the claimed Mullen burst strength, the MD and CD shrinkage, the MD and CD strip tensile strength of the fabric it is reasonable to presume that these properties are inherent to the product of Kirayoglu in view of the teachings of Haid et al. Support for said presumption is found in the use of like materials (i.e. same fabric construction, same polyester staple fibers, same basis weight and treated by a heat setting process). The burden is upon Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of Mullen burst

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strength, the MD and CD shrinkage, the MD and CD strip tensile strength of the fabric would obviously have been present one the fabric of Kirayoglu treated with the heat-setting process of Haid et al. is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977) as to the providing of this rejection made above under 35 USC 102. Reliance upon inherency is not improper even though rejection is based on Section 103 instead of Section 102. *In re Skoner, et al.* (CCPA) 186 USPQ 80.

4. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the nonwoven fabric of KIRAYOGLU and provide with a heat-treatment with the motivation of increasing the web durability and abrasion resistance as disclosed by HAID (Column 2, lines 6-32).

Allowable Subject Matter

5. The following is a statement of reasons for the indication of allowable subject matter: claims 11 and 12 are in condition for allowance. The prior art of HAID requires the inclusion of multi-component fusible fibers to provide a heat-fusing treatment. Such fusible fibers are precluded by claim 11.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Norca L. Torres-Velazquez whose telephone number is 571-272-1484. The examiner can normally be reached on Monday-Thursday 8:00-5:00 pm and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Norca L. Torres-Velazquez
Primary Examiner
Art Unit 1771

October 18, 2005